MCESA REILize Decision Support System
Business Requirements Specification (BRD)

Teacher Data Verification

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1 Document Information

1.1 Version History

VERSION HISTORY

ID	Date	Revised By	Reason for change
0.1	17-Apr-2012	Rich Schnettler	Baseline which includes the initial version that was drafted based upon discussion with Al on 4/12 as well as confirmation of the workflow and requirements draft.

1.2 References

REFERENCES

Supporting Documentation Title	Purpose	Document
MCESA Vision Conceptual Dashboard PDF	Provides a visual rendering of the conceptual REILize Decision Support System in a series of screenshot mockups covering the various modules.	

1.3 Stakeholders

STAKEHOLDERS

Organization	Stakeholder Name	Title	Email Contact
MCESA	Dr. Don Covey	County Superintendent of Schools	Don.Covey@mcesa.maricopa.gov
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1.4   Document Approvals

This document has been approved as the official Business Requirements Document (BRD) for the MCESA REILize Teacher Data Verification module by the business stakeholders.

Following approval of this document, changes will be governed by the project's change management process, including impact analysis, appropriate reviews and approvals, under the general control of the Master Project Plan and according to the Arizona Department of Education Project Management Office policy.

DOCUMENT APPROVALS			
Approver Name	**Project Role**	**Signature/Electronic Approval**	**Date**
Kristine Morris	Business Partner Stakeholder / Advisor		
Jolene Newton	Program Director and Primary Stakeholder Liason		
Pamela Smith	Executive Director of Strategic IT Programs and Stakeholder Liaison		

2 Introduction

The Maricopa County Education Service Agency (MCESA) has undertaken a five-year initiative aimed at improving student academic progress by increasing the effectiveness of teachers and principals. Six local school districts are engaged in the Rewarding Excellence in Instruction and Leadership (REIL) initiative, which is funded by a Teacher Incentive Fund grant from the U.S. Department of Education.

The REIL initiative, at this phase of the project, is comprised of the following modules: Data Management formerly known as Student-Teacher Link, Observation Tool, Professional Development formerly known as Curriculum Resources, Assessment System, Educator Goal Plan, Video Bank and Administration & Reporting.

- Data Management consists of Course Mapping, Human Resources, Incentive Reporting for Teachers, Verification Tool including Teacher Data Verification, and exchange of data.
- Professional Development consists of Online Modules, Face-to-Face Sessions, Online Development Sessions with Registration, Scheduling, progress monitoring and reporting.
- Assessment System includes Authoring, Test Set Up, Administration, Scoring, and Reporting/Analysis.
- Educator Goal Plan module includes Scheduling & Calendar, Evaluation of Results & Approvals, Teacher Support Plans, and Goal Plan Templates.
- Administration & Reporting consists of Dashboards, the REIL score which is comprised of the Observation and Value-Added Scores, Data Analysis, Role-Based Management, Verification of Rosters & Scores, and RDSS setup.

With respect to Teacher Data Verification, the objective is to provide Education Professionals with the tools and access to ensure that their course, roster and other key information is accurate and complete as this forms the basis for entering and/or verifying their amount or percentage of instructional time for each student and each course for which they are teaching.

3 Purpose and Scope

3.1   Purpose

The purpose of this document is to describe business requirements of an application completely, accurately and unambiguously in a technology-independent manner. All attempts have been made in using mostly business terminology and business language while describing the requirements in this document. Very minimal and commonly understood technical terminology is used.

This document will require review and approval sign-offs in order to complete this phase of the project and proceed to the next phase of the project.

The document contains the following sections: Document Information, Introduction, Purpose and Scope, Description of the Project, Business Requirements, Non-functional Requirements, Glossary of Terms, and if necessary, an Appendix.

The Business Requirements that have been collected and defined in this document as a result of a series of meetings and follow-up interviews with MCESA business owners and stakeholders that occurred on April 12th, reviewing and analyzing previously created project documentation posted on the MCESA REIL SharePoint site, and additional follow-up email correspondence.

Business owners and stakeholders from MCESA and ADE officials have specified business requirements and key features for the delivery of Teacher Data Verification.   The next phase of the project is to consider either building in-house or buying from a third-party vendor, the Teacher Data Verification. Thus, a request for information (RFI) document will need to be prepared. An RFI is a formal request made, to ascertain whether a vendor's product would be suitable for addressing MCESA's stated business requirements. Assuming that one or more vendor products can satisfy the business requirements, then a request for proposal (RFP) would be prepared and issued. An RFP is a document to elicit formal bids from potential vendors for a product or service. The next

step is a comparative analysis between the vendor's responses to the RFP with the in-house response in terms of business requirements coverage and cost estimates to implement and sustain the system.

If the decision is made is to build, then the Functional Specifications Document will be one key deliverable in the next phase of the project. Regardless of whether the solution is built or purchased, a Use Case Document will also be a key deliverable.

The check marked option below indicates the type of requirements and overall purpose of this documentation:

☐ Business requirements for major enhancements to an existing application
☒ Business requirements for new application development
☐ Business requirements for replacement application development
☒ Business requirements for a request for information (RFI)
☒ Business requirements for a request for proposals (RFP)

3.2   Scope of Work

The scope of this document is to define and prioritize each business requirement that Teacher Data Verification needs to encompass. Each business requirement should be stated in clear, concise language and covering one discrete thought or idea. Each requirement should be numbered and associated with a corresponding User Story or expected experience in interacting with the Teacher Data Verification feature or function, as well as articulating any exceptions and rules.

4 Description of the Project

4.1 Description

The major goals and objectives of Teacher Data Verification are to provide the following key features and functions associated with Teacher, Student, and Course data:

- Provide the ability to verify the accuracy and completeness of the teachers, courses they teach, as well as the student roster of each course
- Provide the ability to log, manage, track, and report on the resolution of any disputes associated with data verification
- Display dashboard(s) and standard set of canned reports including courses assigned to teachers, student rosters for each course, data discrepancy reports, etc.
- Provide on-line, real-time, 24 x 7 x 365 access to data verification tools and reports

4.2 Rationale

The overarching rationale and benefit of implementing Teacher Data Verification and the business requirements defined therein is that it will achieve REIL grant compliance by:

- Delivering over the internet, it is able to reach a larger audience regardless of their location and availability of time
- Providing a standard set of tools and access to Education Professionals in order for them to validate that their data is one-hundred percent correct
- Providing Education Administrators with the tools to facilitate data corrections

But Teacher Data Verification alone cannot achieve the objective, as it needs to interface with other modules, such as Observation Data Capture Tool (ODCT), Educator Goal Plan (EGP) in order to deliver a total solution as articulated in the REIL program.
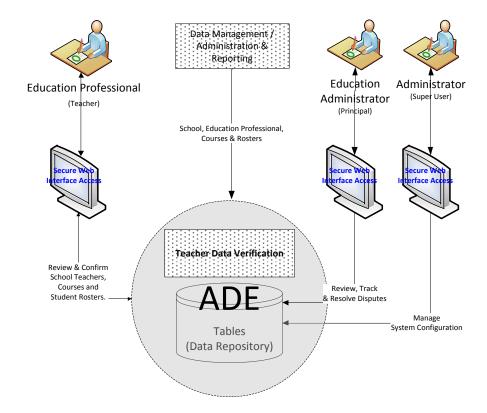
4.3   Environment

4.4 User Characteristics

This section describes the Users and associated Roles that are expected to interact with Teacher Data Verification. It is possible to change the roles assigned to a given user as required. There are four general roles: Education Professional, Education Administrator, Local Administrator and Super User, each with varying and increasing degrees of access, capabilities, and visibility. The Local Administrator does not have any functions performed in data verification but was left as a placeholder. The Users may be physically located in schools, district offices, as well as the MCESA office. Note: This may not be an exhaustive list of Users. Please refer to the **Glossary of Terms** for definitions of the Users as these terms are referenced throughout this document and Appendix A3, REIL DSS Functional Model.

The following table describes the Users identified, a description of the anticipated interactions and/or permissions, the skill level and their expected role. Skill level for each User is ranked <u>high</u> for requiring a significant amount of knowledge and skill to interact with the functionality; <u>medium</u> for a mid-level knowledge, to <u>low</u>, for a relatively small amount of knowledge and skill. The reason for the skill level rating is to aid in the planning and definition of a system training program as well as define a help system to adequately cover all of the Users that will potentially interact with the system.

Thus, the latter two roles, Administrator and Super User are expected to require more system training as compared to Education Professionals. Each User in the table below is grouped by role ranging from the least to the most access to features and functions available.

User(s)	Description	Skill Level	Role(s)
			Education Professional
School Personnel: • Teacher • Instructional Coach • Master Educator	• Should have access to view and/verify the schools in which they teach, the courses to which they are assigned to teach, as well as the student roster for each course • Should be able to verify or dispute the accuracy of their data by logging it into the system • Should be able to view the status and resolution in Teacher Data Verification reports for anything they have logged	Medium	Education Professional
	• Should have same capabilities as an Education Professional		**Education Administrator**
School Personnel: • Principal • Assistant Principal • Staff Advisor	• Should be able to view, track and resolve disputes that have been logged into the system • Should be able to view the status and resolution in Teacher Data Verification reports for anything they have logged	High	Education Administrator
	• Should have same capabilities as an Education Professional		**Local Administrator**
MCESA Employee(s): • Assigned Staff Resource	• No access requirements were identified for this Role	High	Local Administrator
	• Should have same capabilities as an Local Administrator		**Super User**
MCESA Employee	• Should be able to access and perform any function in the associated with the role of a Local Administrator • Should manage site setup and configuration • Should manage user accounts and permission • Should be able to override the rights of other Users • Should have full visibility to any User in the system including reports and transcripts	High	Super User

4.5   General Constraints

ID	Constraint
4.5.1	Must be able to provide antivirus checking on any uploaded external file content (e.g. Module Workbook) being attached to a course.
4.5.2	Data that is stored or used by Teacher Data Verification should be CEDS compliant.

4.6 Assumptions and Dependencies

4.6.1 Assumptions

This section describes major assumptions that were made prior to or during the Business Requirements gathering and documentation.

ID	Assumption	Implications
4.6.1.1	Teacher Data Verification will provide online help system globally available on the site.	If not true, then an alternative method of providing help system should be provided.
4.6.1.2	A shared application or service which features a Single-Sign on along with interoperability between all of the deployed REIL DSS modules is assumed to be documented in the Data Management module.	If not true, then the Teacher Data Verification BRD will need to be amended to include the expected features and functions of such an application.
4.6.1.3	A shared application or service which features the definition of roles and/or permissions as well as assignments to Users is assumed to be documented in the Data Management module.	If not true, then the Teacher Data Verification BRD will need to be amended to include the expected features and functions of such an application.
4.6.1.4	Data Management (DMAR) module which encompasses dashboard reporting should provide the visibility to teacher-student-course for each school in each district from within REIL DSS.	If not true, then the reporting will need to be included in another module otherwise the information will not be available.
4.6.1.5	Any data discrepancy dispute that is logged and confirmed, should require the data to be fixed in whichever system or module it is owned and parented. It may be desirable to also fix the data in the DMAR to expedite the process.	If not true, and the data is only fixed at its source, then it will need to feed back into the DMAR and then to Teacher Data Verification in order to reflect the correction that was made.

4.6.2   Dependencies

This section describes dependencies between the module for which these Business Requirements are written and other applications, databases, and/or processes.

ID	Dependency
4.6.2.1	The Data Management module (DM) may contain the teacher, student, course combinations for each Education Professional for each school and district that may be required by Teacher Data Verification. This may include other types of system setup data that is mastered here.

4.7   Project Risks

This section describes the identified risks to success as determined during the course of requirements gathering and definition. The business may already be aware of some of these, but they will be listed here as a reminder and confirmation of MCESA business and ADE Information Technology awareness, even if the current status is "Retired".

ID	Project Risk	Implications	Severity	Status
4.7.1	If Battelle for Kids is selected as the solution to this business requirement, what is the certainty of this software being supported in the future?	If the funding of BFK by the Dell Foundation ceases, then an alternative solution will need to be selected and implemented instead.	Medium	Open

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5 Business Requirements

The priority definitions used in the business requirements are listed below.

Priority	Description
Critical	This level requirement meets MCESA REIL grant criteria and must be included in the initial release of the project.
High	This level requirement meets criteria to be vetted with business owners and stakeholders before inclusion in the initial release of the project.
Medium	This level requirement is considered a "nice to have" item that has been vetted with customer for possible inclusion within a future release of the project.
Low	This level requirement meets criteria to be excluded from initial release of project, but should be tracked as a potential enhancement to be vetted with business owners and stakeholders for possible inclusion with a future release of the project.

Super User Business Requirements

5.1   Set Instructional Time Entry Option

BR-1	
Priority:	Critical
Release:	Initial
User Story:	As a Super User, I want to set the configuration option to either a percentage or hours/minutes for the teacher instructional time entry feature in order to allow the system to provide an option to enter the time as a percentage or in actual elapsed time in hours and minutes.
Module:	Teacher Data Verification
Description:	The system shall provide the capability for a person to set the Instruction Time Entry configuration option to either a percentage or hours/minutes. Default: percentage. Note: a change in the configuration should result in a change in the label and/or on-page instructions.
Exceptions:	None defined at this time
Rules:	The following business rules apply to this requirement:
5.1.1 None defined at this time	

5.2   Set Instructional Time Entry Help Text Option

BR-2	
Priority:	Critical
Release:	Initial
User Story:	As a Super User, I want to customize the instructions and/or labels for instructional time entry at any time I want in order to align with the instructional time entry option selection that was made.

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BR-2	
Module:	Teacher Data Verification
Description:	The system shall provide the capability for a person to change the Instructions and/or label for instructional time entry.
Exceptions:	None defined at this time
Rules:	The following business rules apply to this requirement:
5.2.1	Must be logged into the system as a Super User.

Education Professional Business Requirements

5.3   Verify Teacher-Student Data

BR-3	
Priority:	Critical
Release:	Initial
User Story:	As an Education Professional (e.g. Teacher), I want the ability periodically verify all aspects of my courses for the school year in order to ensure that it is all 100% accurate and complete.
Application:	Teacher Data Verification
Description:	The system shall provide the capability for a person to verify the accuracy of all their data. The verification of data should include the school in which they teach, all the courses which they are assigned as the teacher of record in the Student-Teacher link, the roster of their students in each course, as well as the amount or percentage of instructional time. Note: The Student-Teacher link contains the definition of the teacher of record for each student-teacher link.
Exceptions:	None defined at this time
Rules:	The following business rules apply to this requirement:
5.3.1	The Education Professional must electronically confirm (e.g. "I Agree My Data is 100% Accurate") that they agree that all their data is correct. Conversely, they may electronically file and log a dispute for each discrepancy as noted above. The system should perform cross-checks when the same student may be taught by more than one teacher for the same course. For example, a teacher A and teacher B both have Student C in course X, but the amount of instructional time should not exceed 100%.
5.3.2	The student roster should be verified each time a course assignment changes.
5.3.3	The amount or percentage of instructional time should be verified each month for each student.

5.4   Record Instructional Time by Course

BR-4

BR-4	
Priority:	Critical
Release:	Initial
User Story:	As an Education Professional (e.g. Teacher), I want the ability to review and enter instructional time for my courses for the school year on a monthly basis in order to ensure that it is all 100% accurate and complete.
Application:	Teacher Data Verification
Description:	The system shall provide the capability for a person to review and enter instructional time for my courses for the school year on a monthly basis. Note: The system should perform exhaustive checks of the teacher entries to ensure that their data is correct both individually and when cross-checked against all teachers over the same time period. For example, a teacher A and teacher B both have Student C, but the amount of instructional time should not exceed 100%.
Exceptions:	None defined at this time
Rules:	The following business rules apply to this requirement:
5.4.1 None defined at this time	

5.5 Log Data Discrepancy Dispute

BR-5	
Priority:	Critical
Release:	Initial
User Story:	As an Education Professional (e.g. Teacher), I want the ability to log a dispute about a discrepancy that I see in my course or roster data in order to correct my record and ensure that all my data is 100% accurate and complete.
Application:	Teacher Data Verification
Description:	The system shall provide the capability for a person to log a dispute about a discrepancy that they may see in their course or roster data. The system should log each dispute in the database and should include the person's name logging the dispute, date and time, reason and/or comments about the nature of the dispute. Additionally, the person logging a dispute may optionally trigger an alert or email message being sent to their Education Administrator for review and resolution.
Exceptions:	None defined at this time
Rules:	The following business rules apply to this requirement:
5.5.1 A person may log a dispute for each data discrepancy identified.	

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Education Administrator Business Requirements

5.6 Resolve Education Professional Disputes

BR-6	
Priority:	Critical
Release:	Initial
User Story:	As an Education Administrator, I want to be able to review and resolve any disputes logged by my subordinate Education Professionsal for which I am responsible in order to ensure that their course and roster data in 100% accurate and complete.
Application:	Teacher Data Verification
Description:	The system shall provide the capability for a person able to review and resolve any disputes logged by their subordinate Education Professionsal for which they are responsible. Note: If data discrepancies are confirmed then the person should be able to request that the data be corrected in the system that masters the data. Additionally, it may be necessary to make a corresponding change to the data in the DMAR in order to expedite the correction within REIL DSS.
Exceptions:	None defined at this time
Rules:	The following business rules apply to this requirement:
5.6.1 None defined at this time	

Miscellaneous Business Requirements

5.7 Teacher Data Verification Reports

BR-7	
Priority:	High
Release:	Initial
User Story:	As a logged in User, I want to be able to access and view reports about student-teacher data appropriate to the role and/or permissions I have been assigned.
Module:	Teacher Data Verification
Description:	The system shall provide the capability for a logged in User to access and view reports about student-teacher data appropriate to the role and/or permissions assigned. The reports shall include use of various filters (e.g. any combination of county, school district, school name, school year, etc.) to provide flexibility in getting the desired report output. The reports should feature export options including saving as a PDF, XLS or CSV as appropriate. The reports should be able to produce a printer-friendly copy to a local printer. Examples of reports should include but are not limited to the following: • List of Education Professionals by County, School District, or School • Education Professional-Course Cross-Reference by Education Professional and by Course by County, School District, or School

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BR-7	
	• Education Professional-Course-Student Roster by County, School District, or School with or without instructional time • List of Education Professionals Logged/Resolved Disputes by County, School District, or School (See Data Discrepancy Log Report)
Exceptions:	None defined at this time
Rules:	The following business rules apply to this requirement:
5.7.1 None defined at this time	

5.8   View/Print Data Discrepancy Log Report

BR-8	
Priority:	Critical
Release:	Initial
User Story:	As a District Office Employee or Education Administrator (e.g. Principal or Superintendent), I want the ability request, view and print a report which lists any data discrepancy that has been logged by an Education Professional in order for me to prioritize my resolution work and identify trends.
Application:	Teacher Data Verification
Description:	The system shall provide the capability to list resolved and unresolved errors that are viewable by the logged in person. Reports should be rendered in a printer-friendly format and exportable to CSV, XLS, and PDF as applicable. Note: The report should provide one or more filters to allow quicker access to relevant report data (e.g. school name, date range, etc). The report should provide capability to customize the sort sequence.
Exceptions:	None defined at this time
Rules:	The following business rules apply to this requirement:
5.8.1 The visibility to errors being reported should be tied to the scope that the logged in User has. For example, the Principal should only see errors for their school and the District Office Employee and Superintendent can view errors for all schools in their district. The Education Professional should only be able to view their own errors.	

5.9   View Alerts

BR-9	
Priority:	High
Release:	Initial
User Story:	As a logged in User, I want to be able to access and view alerts in order to receive up-to-date information about disputes with Education Professional data being logged by

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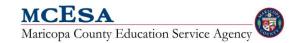© 2012 Arizona Department of Education

BR-9	
	others.
Module:	Teacher Data Verification
Description:	The system shall provide the capability for an User to view alerts resulting from data discrepancy disputes being logged by others. Once the issue associated with an alert has been resolved, then the alert message should cease to display.
Exceptions:	None defined at this time
Rules:	The following business rules apply to this requirement:
5.9.1 None defined at this time	

5.10 RDSS Identity Management & Interoperability

BR-10	
Priority:	Critical
Release:	Initial
User Story:	As a User, I want to be able to login only one time in order to access each module to which I have access.
Module:	TBD
Description:	The system shall provide the capability for a User to only sign-on one time in order to seamlessly access any RDSS module. Therefore, the User will login once and be able to access each module to which they have been granted access permission rather than requiring a separate sign-on for each module independently.
Exceptions:	None defined at this time
Rules:	The following business rules apply to this requirement:
5.10.1 None defined at this time	

5.11 Secured Login Credentials

BR-11	
Priority:	Critical
Release:	Initial
User Story:	As a User, I want to be able to login with secured credentials in order to ensure that I only can access features and functions associated with the user role or permissions that I have been assigned.
Module:	TBD
Description:	The system shall provide the capability for an authorized User to sign-on with their login credentials with the role or permissions they have been assigned.
Exceptions:	None defined at this time
Rules:	The following business rules apply to this requirement:

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BR-11
5.11.1   None defined at this time

6 NON-FUNCTIONAL REQUIREMENTS

6.1 Availability

ID	Requirement
6.1.1	The system needs to be accessible 24x7x365, except for scheduled periodic maintenance. The schedule should be published and clearly communicated to all system Users in advance. A Service Level Agreement (SLA) should be drafted in support of the overall system and not just the Teacher Data Verification module

6.2 Backup and Restore

ID	Requirement
6.2.1	The application server and the associated data should have backup and restore capabilities that are part of the ADE Information Technology Department's approved server backup plan.
6.2.2	In the event of a catastrophic failure, the application should be fully functional within 24 hours.
6.2.3	Business expectations for restoration capabilities are that backup and restore processes will be tested for viability once a quarter, beginning with Q3 2012.

6.3 Capacity

The current capacity that the system needs should be based in part on the following estimated for the initial release of the Vi Teacher Data Verification module. The future capacity is the projected or estimated requirements.

6.3.1 Current

ID	Requirement
6.3.1.1	**# of Logged In Users.** This is the number of people expected to need login credentials for the REIL and REIL Alliance schools, the district offices, and MCESA office in order to access the initial release of Teacher Data Verification is approximately seven thousand. The estimate is based upon the information pulled directly from the REIL grant. Users included in the tabulation are certified superintendents, principals, other administrators; certified teachers and other certified personnel; classified managers, supervisors and directors. Additionally, the MCESA office is expected to need login credentials for less than one hundred employees. Note: Classified teacher aids and other personnel are not included in this estimate.

	REIL TOTALS	REIL Alliance Totals
Staff Type		
Certified --		
Superintendent, Principals, Other Administrators	174	95
Teachers	3380	1500
Other	261	913
Subtotal	3815	2508
Classified --		
Managers, Supervisors, Directors	60	71
Teachers Aids	400	460

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ID	Requirement		
	Other	**1429**	**763**
	Subtotal	**1889**	**1294**
	GRAND TOTALS	**3875**	**2579**
	REIL & REIL ALLIANCE GRAND TOTALS		**6454**

6.3.2 Forecast

ID	Requirement
6.3.2.1	**# of Logged In Users.** It is expected that the number of people expected to need login credentials in the future will need to include all schools and school districts in Maricopa County. The planned implementation strategy is not known at this time.
6.3.2.2	The infrastructure should support the MCESA REILize Decision Support System storage capacities required for the ongoing storage of a rolling ten (10) years of data.
6.3.2.3	A mutually agreeable archiving strategy has yet to be determined between ADE and MCESA; however, the business has determined that whatever archive management approach is decided upon, archived data must be quickly accessible, secure, and online to users of the RDSS.

6.4   Resource Constraints

ID	Requirement
6.4.1	At the time of this writing, ADE has not finalized their standard SLA from which to base the service needs of the MCESA REILize Decision Support System.

6.5   Response Time

ID	Requirement
6.5.1	Teacher Data Verification course catalog search response should be at ± 10 seconds.
6.5.2	Teacher Data Verification page refresh should be at ± 10 seconds.

6.6   Scalability

This section describes the business expectations for IT management of the anticipated growth for the Teacher Data Verification module. The overall infrastructure must support vertical and horizontal scalability (see Glossary in this document).

6.6.1 User Scalability

ID	Requirement
6.6.1.1	The number of concurrent users is expected to grow from 250 for the initial release to 5,500 concurrent users (statewide) in the next five years.
6.6.1.2	The total number of users is expected to grow from 2,500 to 55,000 users (statewide) in the next five years.

6.6.2 Application Scalability

ID	Requirement
6.6.2.1	The Teacher Data Verification module is expected to be capable of full integration with the identified modules comprising the MCESA REILize Decision Support System (RDSS) product. The "look and feel" of each module should have continuity with the Teacher Data Verification.
6.6.2.2	The overall RDSS product is expected to have a 'wrapper' as the front-end design that will complement the yet-to-be designed MCESA web site currently under discussion with a third party vendor.

6.6.3 Data Scalability

ID	Requirement
6.6.3.1	The MCESA database must be able to accommodate storage of a rolling ten (10) years of data without sacrificing processing and refresh times. If a yet-to-be-determined portion of this data will be archived, it must remain readily available to RDSS users via the archive management processes.

6.7   Security

6.7.1   Authorization and Access Controls

This Authorization and Access Control requirements associated with the roles and permissions for Teacher Data Verification should be similar as to those defined in the Video Bank and other BRD's to ensure consistency in the overall solution. The figure from Video Bank was included only for illustrative purposes.

REIL ROLES	VIEW PUBLIC VIDEO	PRIVATE NON-SECURE VIDEO	VIEW PRIVATE SECURE VIDEO	MANAGE CONTENT	QA	APPROVER/ PUBLISHER	REPORTS	HIGHEST REPORTING LEVEL
				<---------- ROLES/PERMISSIONS ---------->				
Visitor	Y	N	N	N	N	N	N	N/A
Teacher	Y	Y	Y*	N	N	N	Y	Self
Assistant Principal/Principal	Y	Y	Y*	N	N	N	Y	Own School
Superintendent	Y	Y	Y*	N	N	N	Y	Own District
VB Administrator - Content Editor	Y	Y	Y*	Y	N	N	Y	All Districts
VB Administrator - Quality Assurance	Y	Y	Y*	N	Y	N	Y	All Districts
VB Administrator - Approver/Publisher	Y	Y	Y*	N	N	Y	Y	All Districts
Super User	Y	Y	Y*	Y	Y	Y	Y	All Districts

* Note: May not have been assigned permission to access and view certain videos.

6.8   Stability

ID	Requirement
6.8.1	The system should be designed such that time-out events and other unexpected system errors are non-occurring or minimally occurring events. If and when these system events occur then the system should record and report it to the IT Development & Support team.

6.9   Minimum User System Capabilities

ID	Requirement
6.9.1	The system should be designed such that it includes the best practices recommendations of a User Centric Design Team to ensure consistency, ease of navigation and intuitiveness.

7 Glossary of Terms

Definitions of terms, acronyms, and abbreviations used in this document:

Terms	Acronyms	Definitions
Arizona Department of Education	ADE	
VB Administrator		A VB Administrator is broadly defined as any user with either a role and/or permission assigned that enables them to administer the Video Bank component of the site by management of its content.
Administrator Roles		A User may have one or more administrator roles assigned to them. Their permissions should be the sum total of the roles to which they are assigned when they login to the system. They should also have access to reports relating to any related area. ●
Assessment		A teacher assessment which is linked to a video may be in the form of an optional pretest and/or required posttest.
Assistant Principals		
Assistant Superintendent		
Career Pathways		A specific position in the Rewarding Excellence and Instruction and Leadership program designed to create opportunities for growth and increased compensation, assisting in the recruitment and retention of the most talented and effective teachers and principals. These include Master Educators, In-Demand Teachers, Peer Evaluators, Turnaround Teachers, and Turnaround Principals. Each Career Pathway contains Teacher Data Verification Topics and a variety of Teacher Data Verification Options to support all learners in moving their professional practice from theory, to practice and on to learning and leading.
Catalog		A listing of the courses offered by Maricopa County Educational Service Agency which includes online modules, face-to-face classroom settings, and online interactive and collaborative tools.
Class		A course that has been scheduled for one or more sessions that may be attended by Education Professionals.
Coach Observation Data Capture Tool	CODCT	The suite of tools that enable the entry of Observation scores for Coach
Common Education Data Standards	CEDS	A specified set of the most commonly used education data elements to support the effective exchange of data within and across states, as student's transition between educational sectors and levels, and for federal reporting. This common vocabulary will enable more consistent and comparable data to be used throughout all education levels and sectors necessary to support improved student achievement. The standards are being developed by NCES with the assistance of a CEDS Stakeholder Group that includes representatives from states, districts, institutions of higher education, state higher education agencies, early childhood organizations, federal program offices, interoperability standards organizations, and key education associations and non-profit organizations. CEDS is a voluntary effort and will increase data interoperability, portability, and comparability across states, districts, and higher education organizations.
Content Item		A Content Item, may consist of general information (e.g. title, description, status, etc.), textual html tagged content, image file (i.e. video thumbnail

Terms	Acronyms	Definitions
		stillshot), search criteria, as well as other content to which it may be related.
Content Library		The content library is a storage repository that may include various types of content used throughout the system including but not limited to text, images, and video. The content may be viewed or referenced in Video Bank, Assessments, Lessons, etc.
Course		One topic or module within a catalog. A course may include a title, synopsis or description, status, target audience (by grade/department and subject), as well as related education resources or content such as video segments, document attachments (e.g. Module Workbook), certificate attachment, URL navigation links, RUBRIC elements and education standards.
Course Type		The type of course may be in the form of an online module, face-to-face classroom setting, or online interactive and collaborative tool.
Dashboard		
Data Element		
Descriptor		A block of descriptive text that is always visible to the user when viewing the Observation Entry screens of the ODCT application. It is associated to each scoring value (0-4 for Administrator | Principal) for elements in the rubrics.
Documentation Event		Applies only to the ODCT Principal Tool and is an evaluation occurrence where the principal's evaluator observes and gathers information that is part of the element scoring criteria. There are 8 types of Documentation events out of a total of 15 events.
Education Professional		An Education Professional is broadly defined as any User that needs to view or access its content, reports, dashboards, as well as related functionality (e.g. Teachers, Principals, Superintendents, District personnel, MCESA personnel, etc.).
Educator Goal Plan	EGP	
Embed Code		All videos will have an embed code and it will be necessary to have a video content item data attribute option that turns this feature on or off for a given video file. For example: A published short video or video snippet that will allow a credentialed User to optionally login to access private, non-secure content published (e.g. Introduction to RUBRIC teaser snippet).
Entry Constraint Indicator		For purposes of this document, this is a grayed-out entry box or a grayed-out cell in a table that indicates an inactive state of availability.
Evaluatees		Persons who are being observed and evaluated; individuals that receive element scores associated to five, Principal-centric rubrics within a variety of event opportunities occurring throughout the Observation Cycle school year.
Evaluators		Persons who will use the Observation Data Capture Tool to record rubric element scores of the Evaluatees they have been assigned to observe and score.
Event		This is the specific occurrence of an observation setting/documentation in the Observation Data Capture Tool for Principals and Assistant Principals.
Face-to-Face		Characteristics of this type of section includes registration; payment if there is a fee; and related resource information.
Formative Conference		This is the first and second formal meeting of a principal with an evaluator.
Formative Cycle		Teacher output report provided after every cycle completes

Terms	Acronyms	Definitions
Report		
Horizontal Scalability		Horizontal scalability is the ability to connect multiple entities so that they work as a single logical unit. Also see *Scalability* in this Glossary.
In System Editing		In System Editing is a feature that allows the Content Editor to choose where a raw video starts and stops and then tag that video segment with the appropriate descriptors (grade, subject, element, level, etc.). Video segments edited in this manner will be branded with a pre-loaded branding video that will play at the start of each video.
Local Education Agency	LEA	Typically a School District
Leading Observation Instrument		Composed of 5 rubrics, this document is the basis for the principal evaluation and scoring. The Acronym LOI can be used here as well.
Learning Observation Instrument	LOI	Composed of 6 rubrics, this document is the basis for the teacher evaluation and scoring.
Mapping		Mapping is the function or process of relating one content item to another (e.g. Mapping a Video Content Item to a Teacher's Educator Goal Plan because the teacher has an action plan item to view a video.
Maximum Scoring Value		The highest scoring value achieved.
Maricopa County Education Service Agency	MCESA	
MCESA Employee		A person employed by the Maricopa County Educational Service Agency.
Mean Value		The mathematical average that is the calculated result of the sum of all scores divided by the count of scores, e.g. (4+2+3+1+4) / 5 = 2.8
Minimum Scoring Value		The lowest scoring value achieved.
Mode Value		The value that occurs most frequently in a data set.
Observation Cycle		A completed evaluation period. An Administrative/Principal Observation Cycle is not broken down into sessions, as is the Teacher Observation Cycle. The Principal Observation Cycle encompasses an entire school year.
Observation Setting Event		Applies only to the ODCT Principal Tool and is an evaluation occurrence where the principal's evaluator observes and gathers information that is part of the element scoring criteria. There are 7 event types of Observation Settings out of a total of 15 events.
Observation Super User		A new REIL role being added in ODCT R2v1 that falls into the new 'super user' class of functional role. Only one Observation Super User may be designated a Primary within each District. All others are Secondary (see *OSA* in this Glossary).
Observation Data Capture Tool Suite	ODCT	The suite of tools that enable the entry of observation scores for Evaluatees.
Observation Cycle Session		One of three components of a teacher Observation Cycle. The three components are: Pre conference, Observation, and Post-Conference.
Observation Score		Numeric value applied to rubric elements and events by evaluators after observing evaluatees in their associated environments where job performance typically occurs.

Terms	Acronyms	Definitions
Observation Super User	OSA	A new REIL role being added in ODCT R2v1 that falls into the new 'super user' class of functional role. Only one OSA may be designated a Primary within each District – all others are Secondary (see *Super User* in this Glossary).
Online Course		Asynchronous learning delivered in the form of Wikis, Blogs, and Discussion boards; Web, Video, and Audio Conferencing; Presence and Instant Messaging; and Voice Authoring and Collaboration.
Online Interactive and Collaborative Tools		• Wikis, blogs, and discussion boards • Web, Video, and Audio Conferencing • Presence and Instant Messaging • Voice Authoring and Collaboration
Online Module		Characteristics of this type of section include a twenty to forty-five minute flash video which may include an interactive embedded quiz or a recorded webinar; optional educator assessment; evaluation form and certificate if credits are attached.
Personnel Action Request	PAR	Payment transaction related to paying a performance incentive.
PD Resource Coordinator		Teacher Data Verification Resource Coordinator is a person that reviews raw footage, annotates footage to note alignment with RUBRIC descriptor and tags areas for editing.
Peer Evaluator		A MCESA employee whose primary responsibility is to perform classroom observations of teachers in REIL districts
Performance level		Correlated to element scoring numbers within each of the rubrics (values of 0-4 for Administrators / Principals and 0 to 5 for teachers).
Presence and Instant Messaging		The function of being able to see if people are logged in on the network, and send them messages in real time. Note: Not certain that the combined functionality is fully available at present as it may be one of the hardest functions to standardize on the internet.
Principal Observation Data Capture Tool	PODCT	The suite of tools that enable the entry of Observation scores for Principals.
Principals		A Principal is an educator who has executive authority for a school. They may be assisted in the execution of their duties by an Assistant Principal.
Private		• Private, non-secure content available to anyone that has logged into the site. An example of this content type is a 4 Pillars video. • Private, secure content only available to anyone that has logged into the site and, to which, they have been granted access. Performance Assessment video is an example of this type of content. Note: Refer to **Appendix 8.4 - MCESA RDSS Video Content Delivery Model**.
Professional Learning Portal		Serves teachers, instructional leaders, and administrators with high quality, engaging professional learning opportunities. Offerings are organized by Learning Series and divided into modules. Modules are offered online and in face-to-face workshops.
Public		Public content is available to anyone who visits the site but has not logged in. A couple of examples of this type of content are the "About REIL" and "teaser" videos. Note: Refer to **Appendix 8.4 - MCESA RDSS Video Content Delivery Model**.
Related Education Resources		Other resources that supplement or complement a course and may take the form of video segments, URL links to other web sites and pages, and file document attachments such as workbooks.

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Terms	Acronyms	Definitions
Report		
Rewarding Excellence in Instruction and Leadership	REIL	An initiative of the Maricopa County Education Service Agency, engages six Maricopa County school districts in implementing systemic change aimed at transforming how schools recruit, retain, support, and compensate effective teachers and principals. The ultimate goal is building the capacity of educators, targeted professional learning, tools for measuring student success, establishment of multiple career pathways, and sustainable, differential, performance-based compensation are critical elements of REIL. The five year initiative, which will culminate in 2014-2015, is funded by a $51.5 million Teacher Incentive Fund Grant from the US Department of Education.
REIL Field Specialist		REIL Field Specialist is a person that is responsible for the supervision of Peer Evaluators and that may also vet the video content being developed for delivery in the Video Bank since they are also the Subject Matter Expert (i.e. SME).
RUBRIC		A rubric is a scoring tool used to assess educators (e.g. Teachers, principals)
Scalability		Scalability is the ability of a system, network, or process to handle an increasing amount of work in a capable manner, or its ability to be enlarged to accommodate growth. A system whose performance improves proportionally to the hardware capacity added is said to be a scalable system.
Section Type		Online course or Face-to-face course.
Series		A group of related courses. There are three series to which a course may be categorized: learning, coaching and leading. A course may be categorized in one and only one series.
Shared Observation Cycle		**Relates to ODCT R2v1 only**: The assignment of two or more evaluators to a single evaluatee for an Observation Cycle within a fiscal year. This is likely to occur in the larger school districts, e.g. Phoenix Union, due to the higher count of Principals and Assistant Principals to be evaluated for the year, coupled with the large number of events to observe within multiple settings.
Standard Report		Any other report that is not a dashboard or graphical style of report such as a list of items.
Student Test Score		Numeric value resulting from the administration of a student assessment
Summative Conference		The third (and final) formal meeting of a principal with an evaluator.
Summative Cycle Report		Summary report of the Observation Cycle for a school year.
Superintendent		A person who directs and manages a school district. They may be assisted by an Assistant Superintendent in the execution of these duties.
Super User		A class of functional role with an associated REIL role that has special permissions and screen visibility associated to login identification processes. The super user class has multiple types to accommodate the unique business rules and functional requirements of each type. Each type of super user will have a unique name to identify it. Super user types are required in the ODCT Suite to mitigate special circumstances in business process (a.k.a. Super User or sysadmin). The responsibilities typically include setup and configuring, establishing and managing user accounts, etc. They should have full visibility to anyone in the system including reports.
Synchronous		A student-centered teaching method that uses online learning resources to

Terms	Acronyms	Definitions
Learning		facilitate information sharing outside the constraints of time and place among a network of people.
Teacher		Educators instructing students in the schools within each district. Teachers are the Evaluatees of the Learning Observation Instrument.
Teacher Observation Data Capture Tool	TODCT	The suite of tools that enable the entry of Observation scores for Teachers
Value		Number representing the performance level of a particular element in an Observation Cycle Session
Value Added Score		Numeric value resulting from the application of a mathematical model designed to measure instructional effectiveness
Vertical Scalability		Vertical scalability is the ability to increase the capacity of existing hardware or software by adding resources, such as adding processing power to a server to make it faster. Also see *Scalability* in this Glossary.
Video Bank	VB	A component of the RDSS housing videos
Video Content Item		A Video Content Item, specific to video media, may consist of general information (e.g. title, short and long description, status, etc.), one or more raw footage video files, and one or more video segments created from the raw footage video. A video segment may also feature related metadata and/or tagged content (e.g. district name, school name, teacher name, RUBRIC descriptor-performance level, grade band or level (i.e. pre-K thru 12), subject area (e.g. Math or Art), video score, search keywords, academic standards, etc.). Note: Video thumbnail images may show up next to main video on VB tab as per the conceptual slides.
Videographer		A person that has been assigned the role or permission to manage the production of video and video content.
Video Segment		A Video Segment is a fragment of the entire raw footage of a video. The segment may be a still shot, a video clip, short or long video. The content editor should be able to perform "in system editing" and brand each video instead of relying on the videographer.
Visitor		Any person who is visiting the RDSS site and has not logged in.
Voice Authoring and Collaboration		Online tool set used for language learning, instruction and collaboration that facilitates vocal instruction, collaboration, personalized coaching, and assessment. Podcasting allows instructors to create instant lectures and notes, while voice recordings provide thoughtful, quick feedback to students.

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APPENDIX A. Supporting Documentation

A1.   Data Requirements

These are the data requirements that were collected during the Business Requirements discovery phase. See section A3 for an initial list of elements.

Data Element	Priority	Comments

A2. Teacher Course & Roster Data Verification Workflow

The figure in this section defines the workflow that may be required to support the teacher's course and roster data verification process.

Title   Teacher Course & Roster Data Verification

Note: Teacher Verification of their data occurs over the course of a school year.

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